REMARKS

Applicant has clarified each of the independent claims, in response to the Examiner's recent rejections/objections. As noted below, applicant believes that such rejections/objections are without basis. Thus, since the substance of the claims has not been significantly altered, it is argued that the present clarifications would not require a new search and/or consideration.

For the Examiner's convenience, a clean copy of Claim 1 is set forth below.

1. A method performed utilizing a computer system, the method comprising:

receiving via an input device of the computer system a price-frequency mathematical distribution of prices associated with at least one non-optimized supplier;

storing the distribution of prices in memory of the computer system;

receiving via the input device of the computer system a number of competitors, a business objective, and a cost associated with a good or service;

storing the number of competitors, business objective, and cost associated with the good or service in the memory of the computer system;

producing a set of non-optimized prices based on the distribution of prices, by selecting at least one non-optimized price for each competitor from the distribution of prices, utilizing a processor of the computer system;

calculating an optimal price based on the selected non-optimized prices, number of competitors, business objective, and cost associated with the good or service, wherein the business objective is selected from the group consisting of maximizing revenue for the good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service, utilizing the processor of the computer system;

displaying via an output device of the computer system the calculated optimal price for accomplishing the business objective;

simulating the optimal price to generate an updated optimal price by identifying a result of utilizing the optimal price, where the result is stored, and a search is performed for the updated optimal price that optimizes a user-selected

business objective selected from the group consisting of maximizing revenue for the good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before interest and tax (EBIT) for the good or service, utilizing the processor of the computer system,

where

a) the result includes an expected result,

b) the expected result is compared with an actual result,

c) it is determined whether an optimization is required based on the comparison, and

d) if it is determined that the optimization is required, the updated optimal price is identified; and

displaying via the output device of the computer system the updated optimal price for further accomplishing the business objective.

35 U.S.C. 112

The Examiner has again rejected Claims 1, 17, and 18 under 35 U.S.C. 112, second paragraph.

First, under paragraph a), the Examiner argues that the subject matter from Claims 6 and 7 (non-optimized . . .) are no longer related to any other subsequent steps or pricing schemes.

This is simply not the case. Following are excerpts from the original claim language (which still substantially, but not identically exists) that shows the interrelationship of the non-optimized claim elements:

"wherein a distribution of prices associated with at least one non-optimized supplier is identified"

"wherein a set of non-optimized prices is produced based on the distribution of prices associated with the at least one non-optimized supplier"

"wherein one price for each competitor is selected from the distribution of prices"

"identifying the optimal price based on the prices." (see each of the independent claims).

Thus, from these excerpts, it is clear that the optimal price is based, at least in part, on the non-optimized prices selected from the distribution of prices, which, in turn, is associated with at least one non-optimized supplier.

Despite the foregoing correlation that clearly existed previously, applicant has further clarified the claims to emphasize this interrelationship.

Further, under paragraph a), the only other example of any sort of alleged indefiniteness that the Examiner provides is in reference to applicant's claimed "wherein feedback is utilized in generating an updated optimal price by identifying a result of utilizing the optimal price." Specifically, the Examiner asks "what happens after the feedback is utilized?"

The answer to such question is clearly set forth in the original amended claim language. See the exemplary excerpts (which still substantially, but not identically exist) below.

"wherein feedback is utilized in generating an updated optimal price by identifying a result of utilizing the optimal price,"

"where the at least one result is stored, and a search is performed for the updated optimum price that optimizes a user-selected business objective"

"where

a) the result includes an expected result,

b) the expected result is compared with an actual result,

c) it is determined whether an optimization is required based on the comparison, and

d) if it is determined that the optimization is required, a new price value is identified."

Thus, from these excerpts, it is clear that the feedback is used to identify an updated optimal price. Despite the foregoing correlation that clearly existed previously, applicant has further clarified the claims.

Next, under paragraph b), the Examiner makes mention of a 35 U.S.C. 101 rejection. This rejection seems misplaced under the rejection under 35 U.S.C. 112, and will be addressed in the appropriate section below.

Further, under paragraph c), the Examiner references again the allegedly missing steps. In response, applicant again notes the responses above to all of the Examiner's specific rejections, as well as the further clarification of the claims. Still yet, the Examiner objects to applicant's use of the "wherein" clauses. In response, applicant points out that the Examiner has no basis for such objection, as "wherein" clauses are typically and frequently relied upon in patent claims. Nevertheless, in the spirit of expediting the prosecution of the present application, applicant has amended the claims per the Examiner's request.

Still yet, under paragraph d), the Examiner objects to an alleged lack an intended use that results in a manipulative difference, etc. In response, applicant points out the exemplary excerpts from the original amended claims (which still substantially, but not identically exist) below.

> "optimiz[es]ing a user-selected business objective selected from the group consisting of maximizing revenue for the good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before interest and tax (EBIT) for the good or service."

Clearly, a manipulative difference, etc. exists, since only applicant teaches and claims the specific processing, etc. that ideally achieves the foregoing optimization.

Nevertheless, in the spirit of expediting the prosecution of the present application, applicant has further clarified the claims per the Examiner's request, to further emphasize the referenced difference.

It is noted that, on page 6 of the Examiner's action, objections are made to additional allegedly missing elements. These rejections have been addressed by the above remarks and/or the clarifications made to the claims hereinabove.

35 U.S.C. 101

The Examiner has again rejected Claims 1-5, 15-16, and 18-37 under 35 U.S.C. 101 because the claimed invention is allegedly directed to non-statutory subject matter. Applicant respectfully disagrees with this assertion.

Specifically, the Examiner argues that the claims do not recite any "useful" result. Quite to the contrary, applicant specifically claims "optimiz[es]ing a user-selected business objective selected from the group consisting of maximizing revenue for the good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before interest and tax (EBIT) for the good or service" (see each of the independent claims). This is clearly "useful," in the context of the real world.

Still yet, the Examiner goes on to argue that the claims "do not render the steps any more "useful, tangible, and concrete" than if done by hand." In other words, just because abstract ideas are executed with the calculating computer or data processing system does not make the process any less abstract. Therefore, the claimed method claims are not directed to statutory subject matter because the invention as a whole does not produces a "useful, concrete and tangible result."

Again, applicant argues that a tangible result does indeed result, as noted above. Nevertheless, in the spirit of expediting the prosecution of the present application, applicant has clarified the claims per the Examiner's request, to further emphasize tangible input and output via input/output devices.

35 U.S.C. 102

The Examiner has again rejected Claims 1-5, 15-21, and 29-31 under 35 U.S.C 102(e) as being anticipated by Delurgio et al. (US 6,553,352). Applicant respectfully disagrees with such rejection.

First, in the Examiner's consideration of the independent claims, it is noted that the Examiner only addresses 5 of the 10 paragraphs (the subject matter of which substantially, but not identically still exists) that applicant previously presented for consideration.

Note, for example, the claim language below, at the very least, which the Examiner has still not adequately considered:

"A method performed utilizing a computer system, the method comprising:

receiving via an input device of the computer system a price-frequency mathematical distribution of prices associated with at least one non-optimized supplier;

storing the distribution of prices in memory of the computer system;

receiving via the input device of the computer system a number of competitors, a business objective, and a cost associated with a good or service;

storing the number of competitors, business objective, and cost associated with the good or service in the memory of the computer system;

producing a set of non-optimized prices based on the distribution of prices, by selecting at least one non-optimized price for each competitor from the distribution of prices, utilizing a processor of the computer system;

calculating an optimal price based on the selected non-optimized prices, number of competitors, business objective, and cost associated with the good or service, wherein the business objective is selected from the group consisting of maximizing revenue for the good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before income tax (EBIT) for the good or service, utilizing the processor of the computer system;

displaying via an output device of the computer system the calculated optimal price for accomplishing the business objective;

<u>simulating the optimal price to generate an updated optimal price by identifying a result of utilizing the optimal price, where the result is stored, and a search is performed for the updated optimal price that optimizes a user-selected business objective selected from the group consisting of maximizing revenue for the good or service, maximizing gross profit for the good or service, maximizing factory utilization for the good or service, maximizing market share for the good or service, and maximizing earnings before interest and tax (EBIT) for the good or service, utilizing the processor of the computer system,</u>

<u>where</u>

<u>a) the result includes an expected result,</u>

b) the expected result is compared with an actual result,

c) it is determined whether an optimization is required based on the comparison, and

d) if it is determined that the optimization is required, the updated optimal price is identified; and

displaying via the output device of the computer system the updated optimal price for further accomplishing the business objective."

These emphasized limitations are simply non-existent in Delurgio.

By this fact alone, applicant argues that the Examiner's prior art rejection is deficient. Nevertheless, to further illustrate the manner in which the present claims distinguish Delurgio, further discussion is set forth hereinbelow.

Delurgio does not even suggest any sort of "simulation" or "simulator" in association with an optimal price, as claimed.

Using applicant's claimed method, computer product, and system, a user can simulate an optimal price given a market condition including those where the number of competitors, their pricing strategy, and their frequency of issuing quotes has changed and may not necessarily be reflected in historical sales order data of the supplier. The Examiner should note that one of ordinary skill in the art would recognize Delurgio is limited by the use of historical data [derived from selling products in a specific market] and therefore can not simulate any market condition. In the Background of Invention section of the originally filed application, on pages 1-3 thereof, there is a complete discussion of the challenges associated with the use of the approach described by Delurgio.

Delurgio does not even suggest any sort of generation of an optimal price based on "a price-frequency mathematical distribution," as claimed.

After a careful review of Delurgio, it is strongly noted that Delurgio is completely deficient in this regard. The Examiner should not confuse Delurgio's mention of "...estimated product demand..." as being the same as "receiving a plurality of prices associated with a price-frequency mathematical distribution" (see each of the independent claims). As one of ordinary skill would understand, an "estimated product demand" in this

context is a historical relationship of price to the number of units sold of a product by the supplier attempting to optimize price. For example, an estimated demand for the supplier attempting to optimize price could be that if the supplier prices at $1, the supplier historically sold 10,000 units, and if the supplier prices at $1.10, the supplier historically sold 9,500 units, and so on.

In contrast, a price-frequency mathematical distribution is a frequency count of prices (e.g. competitor prices, etc.) observed. So for example, a price-frequency mathematical distribution may optionally be as follows: price a product 100 times at $1, 120 times at $1.10, 150 times at a $1.20, and so on.

Thus, a "price-frequency mathematical distribution" is not the same as an "estimated demand." The two terms refer to **completely different relationships**.

Delurgio does not even suggest any sort of "number of competitors," as claimed.

The significance of this omission is clear when considering the following example. If a supplier determines the optimal price to sell their product is $35.00 with a single competitor, the presence of twenty competitors would result in the supplier's optimal price being likely lower. Delurgio's disclosure is completely void of any language referencing the number of competitors.

The Examiner is reminded that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, the identical invention must be shown in as complete detail as contained in the claim. *Richardson v. Suzuki Motor Co.*868 F.2d 1226, 1236, 9USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

This criterion has simply not been met by the Delurgio reference, especially in view of the amendments made hereinabove. A notice of allowance or specific prior art showing of each of the foregoing claim elements, in combination with the remaining claimed features, is respectfully requested.

It is further noted that the Examiner has not adequately responded to applicant's arguments regarding applicant's dependent claims. Again, a notice of allowance or specific prior art showing of each of the foregoing claim elements, in combination with the remaining claimed features, is respectfully requested.

Even still, the Examiner has again rejected Claims 22-28 and 32-36 under 35 U.S.C 103(a) as being unpatentable over Delurgio et al. (US 6,553,352). Specifically, the Examiner argues that "at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify Delurgio to utilize the price-frequency mathematical distribution; identify the lowest price as a winning bid along with a corresponding supplier; add the winning bid and the probability of a customer purchase to an actual results table; calculate the value for competition by summing each event of randomly selecting a set of prices corresponding to the number of competitors; calculate the value representing a sum of wins corresponding to the supplier; and calculate the actual win-rate by dividing the sum of wins be the value for competition because Applicant has not disclosed that utilizing mathematical distribution and win-rate provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the optimization engine of Delurgio et al. because it would provide a superior technique for configuring optimization prices of products for sale."

Applicant respectfully disagrees. The advantages of the present dependent claim limitations at issue, include the fact that they may be beneficial in overcoming at least six disadvantages of Delurgio. These disadvantages are discussed in the specification [refer to Page 2 line 24 through Page 3 line 5] and are repeated here for the convenience of the Examiner: a) Limited span in sales order data in which to build the demand curve, b) Lack of statistically relevant sales order data, c) Lack of market relevant sales order data, d) Implicit assumption that the historical and future sales environments remain the same, e) Lack of a rapid method for assessing whether a new optimized price is required as a result of a shift in market demand or pricing, and f) Lack of a method of rapidly updating the optimized price calculation.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

Applicant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, since the prior art reference fails to teach or suggest all the claim limitations.

Yet again, a notice of allowance or specific prior art showing of each of the foregoing claim elements, in combination with the remaining claimed features, is respectfully requested.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. For payment of any fees due in connection with the filing of this paper, the Commissioner is authorized to charge such fees to Deposit Account No. 50-1351 (Order No. ABE1P003).

Respectfully submitted,

Kevin J. Zilka
Registration No. 41,429

P.O. Box 721120
San Jose, CA 95172-1120
Telephone: (408) 505-5100